

*Previous knowledge.* Common on soils derived from the Moenkopi formation in se. UT and ne. AZ.

*Significance.* This is the first record of the species in CO.—WALT KELLEY, Dept. of Biology, Mesa College, Grand Junction, CO and DIETER H. WILKEN, Dept. of Botany, Colorado State Univ., Ft. Collins 80523.

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## REVIEW

*Intermountain Flora: Vascular Plants of the Intermountain West, U.S.A.* Volume 4. By ARTHUR CRONQUIST, ARTHUR H. HOLMGREN, NOEL H. HOLMGREN, JAMES L. REVEAL, and PATRICIA K. HOLMGREN. The New York Botanical Garden, New York. 1984. \$77.50 (U.S.), \$79.00 (non U.S.). ISBN 0-89327-248-5.

The publication of volume 4 of the Intermountain Flora represents another landmark of botanical excellence for western United States. The Flora, this time published by the New York Botanical Garden, is the third volume of their proposed six volume series, covers Cronquist's Subclass Asteridae and includes 28 families, leaving the Asteraceae for volume 5. This volume was written largely by Cronquist and Noel Holmgren. Cronquist authors 13 families and co-authors four others, two with Jim Reveal (Lamiaceae, Cuscutaceae), and one each with Arthur Holmgren (Caprifoliaceae), and C. L. Hitchcock (Solanaceae). Noel Holmgren authors nine families including the Scrophulariaceae, the largest in the book (215 species, including 104 species of *Penstemon*!). Pat Holmgren contributes the Campanulaceae and, with Noel, the Asclepiadaceae.

The format used is the same as in the preceding volumes, complete with excellent illustrations of each species contributed largely by Jeanne R. Janish, Bobbi Angell and Robin Jess. The book provides complete citation of synonymy, very readable, well-written descriptions, ample discussions of distribution, and perhaps most importantly, comments on past treatments of groups and the rationale for the present treatments. These commentaries, to me, are the best part of the book because they provide historical perspectives and often in-depth discussions of nomenclatural problems; and when coupled with the references, allow for direct access to literature of a group. Even if a person has no direct interest in the Intermountain area, the book is an important reference bringing together much information on the plants of western North America. While the book is invaluable to practicing botanists, it will also be very useful to beginning botanists, non-botanical professionals and amateurs who can use the illustrations to help them through the keys (or one may rely entirely on the pictures to identify plants in question). In this regard the Intermountain Flora is potentially useful to a large segment of the Intermountain population. The book is also, to some degree, user friendly in that both technical and artificial keys are provided in some large genera and species that are known outside the area, but that may eventually be found in the region.

Regarding taxonomy, *Neogaerrhinum* is separated from *Antirrhinum*, *Fraseria* from *Swerthia*, *Gentianella* and *Gentianopsis* from *Gentiana*, and *Leucophysalis* from *Chaemaeseracha*. *Tiquilia* replaces our *Coldenia*. However, *Glandularia* is not distinguished from *Verbena*. The careful work of Dempster and Erhendorfer in the *Galium multiflora* complex has been critiqued and reduced to a more "practical" taxonomy (3 varieties) in a lengthy discussion by Cronquist. Likewise, Grant's *Gilia inconspicua* complex has been reduced and *Ipomopsis* is not distinguished from *Gilia*. While Grant admits some elements in the *Gilia inconspicua* complex may be disregarded in favor of more easily discernable morphotaxa, he (pers. comm. 1984) feels that the reduction has gone too far and that taxa such as *Gilia opthalmoides* and *G. clokeyi*

are recognizable, morphologically and ecologically. *Ipomopsis* has been accepted as distinct from *Gilia* by all recent workers in Polemoniaceae, and in all but one recent western flora, and its recognition leaves a much "cleaner" *Gilia*. But we are reminded that taxonomy still consists mostly of opinion. At least their preferences have been openly discussed and not proposed by fiat. As in past works from the New York Botanical Garden, infraspecific taxa are recognized primarily at the rank of variety and 38 new combinations are made at that level, only three of which represent simple subsp.-to-var. changes.

The volume is very well edited and has a list of new combinations and an index in the back. It represents a fine contribution to systematic botany that reflects well on the authors, their institution and on the field of systematic botany as a whole. While some may feel the price is high, we must remember what happened to the nickle candy bar. One should consider it an investment. The Flora is sure to have a strong influence on plant systematics in the years to come.—JAMES HENRICKSON, Biology Department, California State University, Los Angeles 90032.

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## PUBLICATION ANNOUNCEMENT

### LAS GRAMINEAS DE MÉXICO

Alan Ackerman Beetle and collaborators. Secretaría de Agricultura y Recursos Hidráulicos under the auspices of COTECOCA [Comisión Técnico Consultiva par el Determinación Regional de los Coeficientes de Agostadero]. 260 pp., 1983. This first of four volumes includes a key to the subfamilies, tribes and genera, and treats genera and their species through the letter A. The following three volumes, intended for publication in 1984, will complete the taxonomic treatment and in addition contain bibliography, synonymy, glossary and general index. Species treatments include full page illustrations and maps giving distributions within states.

According to a notice in *Macpalxochitl* [newsletter of the Sociedad Botánica de México], institutions or investigators interested in obtaining a copy of this book may address their request to Ing. Horacio García Aguilar, Secretario de Agricultura y Recursos Hidráulicos with a copy for Victor Jaramillo Villalobos [Director General de COTECOCA]. Such a letter should state the reasons for wishing to have a copy of the work.—ANNETTA CARTER

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Note added in proof (See Harms, pp. 1–10, this issue):

The following article was published too late to be incorporated into the text of Harms, Madroño 32(1):1–10:

PAVLICK, L. E. and J. LOOMAN. 1984. Taxonomy and nomenclature of rough fescues, *Festuca altaica*, *F. campestris* (*F. scabrella* var. *major*), and *F. hallii*, in Canada and the adjacent part of the United States. *Canad. J. Bot.* 62(8):1739–1749.

Although not taken into account, it is not believed to alter the premises and conclusions of the paper in Madroño. The reader is referred to the Pavlick and Looman paper in conjunction with the present paper for amplified morphological (specifically anatomical) and cytological data, and for differing taxonomic interpretations.